

Mortgage Banker

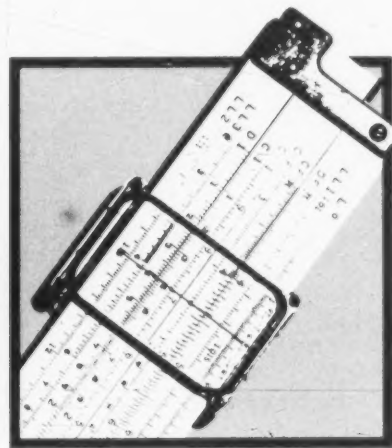
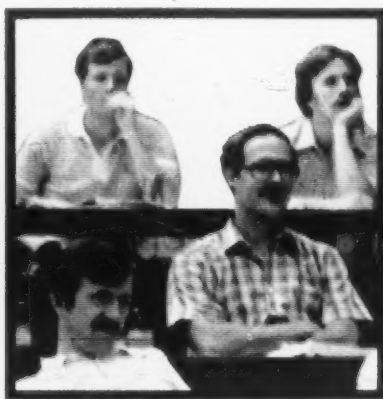
APRIL 1980



Mortgage Banking in the 1980's

Mortgage Banker

VOLUME 40 NUMBER 7 APRIL 1980



29 1980's Mortgage Banking

49 School of Mortgage Banking

53 Need A Consultant?

Executive Editor, William E. Henry
Editor, John T. Aquino
Advertising, J. Michael McFall
Assistant Editor, Stephanie Smart
Circulation, Lygia Washington



Published monthly since 1939 by the
Mortgage Bankers Association
of America

Mortgage Banker (ISSN 0027-1241)

Published monthly and Copyright © 1980 by the Mortgage Bankers Association of America. Opinions expressed are those of the authors or the persons quoted and not necessarily those of the Association. Subscription rates: \$10 per year, \$20 for three years, or \$5 each for ten or more subscriptions mailed to the same addressee. In Canada, \$12 per year, foreign \$14 per year. Individual copies, \$2.50 each. Controlled circulation postage paid at Richmond, VA. Subscription orders should be sent to P.O. Box 37236, Washington, D.C. 20013. Letters, manuscripts, change of address, and all other correspondence should be sent to Mortgage Banker, 1125 15th Street, NW, Washington, D.C. 20005. Six to eight weeks are required for a change of address. Along with new address, send last magazine label.

Business and Editorial Offices
1125 15th Street, N.W.
Washington, D.C. 20005
(202) 785-8333



Mortgage Banking in the 1980's

Thomas A. Harter and Schuyler Schell

29

Certified Mortgage Banker Program: Broadened and Strengthened

Thomas M. French, Jr.

46

School of Mortgage Banking: A History

49

Need a Consultant? Ask an Engineer.

Alfred Wilner

53

DEPARTMENTS

Starts	5	Books	63
Letters	7	The Association	65
Industry	10	Advertisers Index	66
People	20	Classified Advertisements	67
Mortgage Market Trends	57		

MORTGAGE BANKING IN THE 1980'S

Thomas R. Harter and Schuyler Schell

The new decade of the 1980's holds great promise for the mortgage lending industry. The baby boom behemoth will assemble en masse to bid in the housing market. The swelling labor force will attain a relatively high degree of maturity, skills, and productivity, requiring more and more office, retail, and manufacturing space. And the eventual return of rising real in-

comes and consumer optimism will have an extremely salutary effect on the economy in general and mortgage lending in particular. Lurking within this silvered cloud, however, may well be a very dark lining composed of high inflation, excessive regulation, and faltering output, threatening to dampen the optimism that rightfully belongs to the mortgage lending industry.

Dr. Harter is MBA chief economist and Mr. Schell, assistant economist.

80's DEMOGRAPHICS

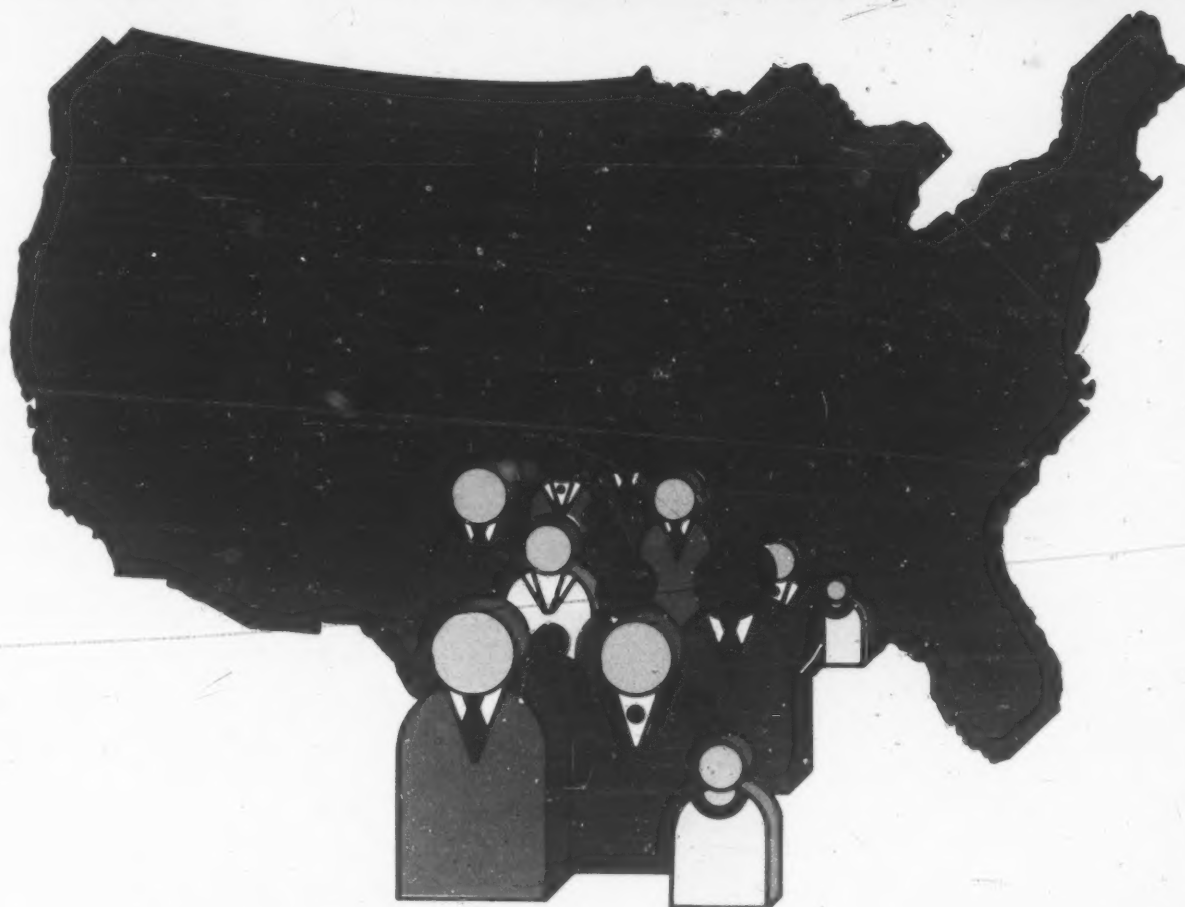
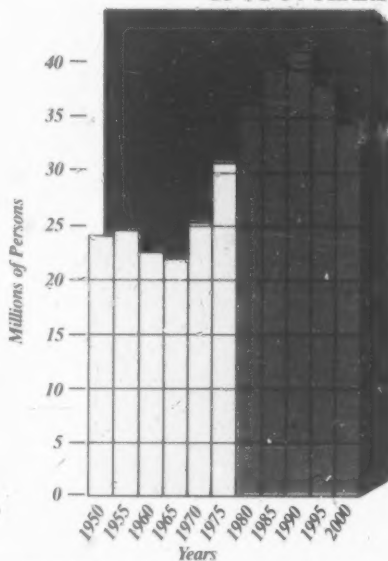


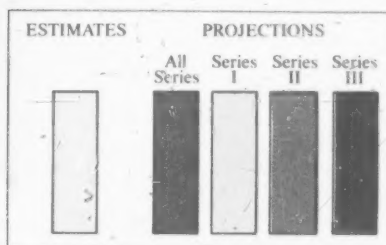
**FIGURE 1
POPULATION
TRENDS BY AGE GROUP:
25 TO 34 YEARS**



SOURCE: U.S. Bureau of the Census, July 1977

Demographic factors, such as relative increases in certain population age groups and changes in household composition and size, provide much of the underlying strength behind today's, as well as tomorrow's, swelling housing demand. Population, in general, will increase by over 21 million people in the coming decade. This is like adding on two new states with the population of Texas and Florida, or like adding another California. The population age group of critical interest spans the ages of 24 to 35 years, the prime house-buying population responsible for the purchase of ap-

proximately 50 percent of the single-family houses sold in recent years. It follows that substantial changes in this population group will have a marked effect on house sales and construction activity. This has been the case during the past decade with the coming of house-buying age of the WWII baby boom population, which swelled the ranks of prime house buyers by 43 percent between 1965 and 1976. This population group will swell by another nine million persons by 1990, representing a 28-percent increase from the 1976 level, increasing three times faster than the overall population growth (see Figure 1).



Key for Figures 1, 2, 4, 5, 6, 7

Housing demand

Recent trends in household formation have contributed substantially to the increased demand for housing. The average household size, recorded at 3.33 in 1960, stood at 2.89 in 1976, after a decline of 5.7 percent in the 60's and of 8 percent between 1970 and 1976. These decreases can be attributed to a combination of fac-

tors: increased numbers of Americans living alone, lower birth rates, delayed marriages, and higher divorce rates. The drop in household size, coupled with steady population growth, resulted in a 20.1 percent jump in the number of households in the 60's and a 14.7 percent increase from 1970 to 1976.

Household size throughout the 80's will continue the decline started in the mid-60's, with the average number of persons per household expected to drop to 2.73 persons in 1980, 2.60 in 1984, and to finish the decade at under 2.50. The continued growth in the prime household-forming age, combined with the increase in households with a householder 65 years old and older, promises further growth in household formation (see Figure 2). Today's tendency, and one likely to continue throughout the 80's, is for more elderly persons to maintain their own homes for a longer period than in the past, slowing the rate of household dissolution.

The net effect of these trends is continued strong household formation throughout the 80's. Whereas the number of households showed an average annual increase of 504,000 in 1940 and 850,000 in 1960, the formation rate jumped to over 1.5 million households in 1975. The 80's may see increases of between 1.5 and 1.9 million households, with 1.65 million a likely average. While the absolute level of household formation is increasing at record, or near-record, levels, there will probably be a slight slowing in the annual levels of percentage increase in number of households, from 2.2 percent per year in the early 80's to 1.8 percent per year in the late 80's. Overall, the number of households will increase by 9 million units (16 percent) in the 80's (see Figure 3) surpassing even the 70's phenomenal seven million household, or 14 percent, increase.

Another household formation trend worth mentioning is the changing distribution of household type with regard to family or non-family status. Husband-wife households comprised over 62 percent of the total households in 1978 according to the Bureau of Census Current Population Survey, while non-family households, (predominantly one-person) comprised 25 percent of all households. This distribution is likely to stand at 58 percent for husband-wife households in 1985 and almost 29 percent for single households, and by 1990, 55 and 31 percent, respectively. As households become smaller, with increasing numbers of single and elderly people, housing demand will also shift to require different forms and locations of housing. The

repercussion in the housing market will be significant, to say the least.

Another baby boom

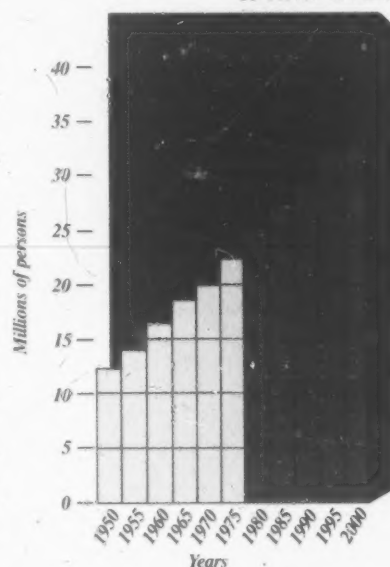
Those who have not yet recovered from the impact of the WWII baby boom on both the housing and mortgage markets had better hold on to their seats, or better yet, their houses: the potential for another baby boom, perhaps even bigger than the last one, is in place. The WWII baby boom, which created a bulge in the prime first-time house-buying cohort, has also created a respectable bulge in the number of women 18 to 34 years old—the prime childbearing age. Because of this expansion, another population explosion is a distinct possibility.

For instance, women 18-34-years-old accounted for 87 percent of the total fertility rate in 1975. In 1950, there were approximately 20.3 million women between the ages of 18 and 34. In 1985, this number is expected to stand at 33.8 million, or a 66.5 percent increase over the 1950 level. With such a huge expansion in the childbearing population, it is easy to imagine a future baby boom that would make the last one appear meager by comparison.

The repercussions of the WWII baby boom may span over a century, or its effects may dribble away in a matter of decades. The unknowns regarding birth rates and fertility are as great as the potential for continued radical population growth.

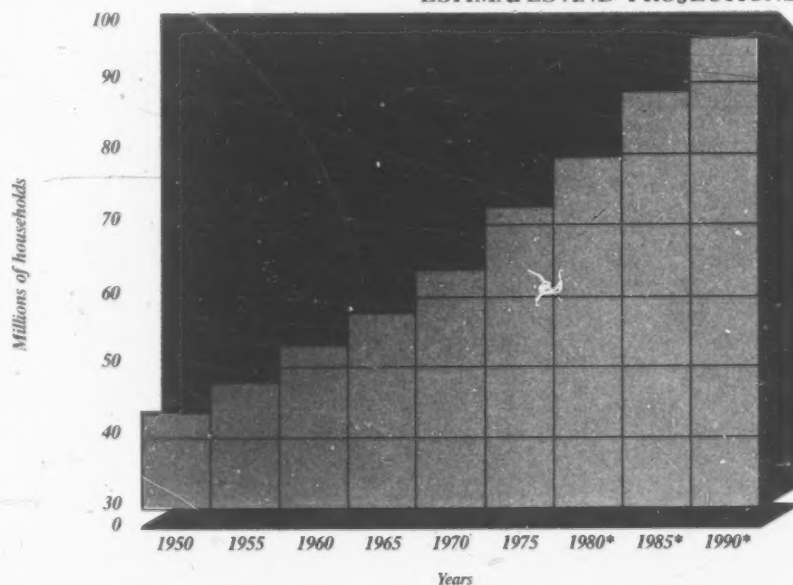
In all likelihood, however, the sequel to the WWII baby boom, like most sequels, will not approach the relative magnitude of the original. After all, a glut in the childbearing population alone does

**FIGURE 2
POPULATION
TRENDS BY AGE GROUP:
65 AND OVER**



SOURCE: U.S. Bureau of the Census, July 1977

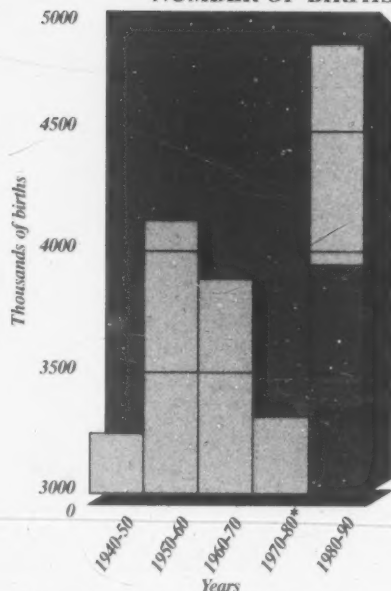
**FIGURE 3
NUMBER OF HOUSEHOLDS:
ESTIMATES AND PROJECTIONS**



* Projection—Series B (new)

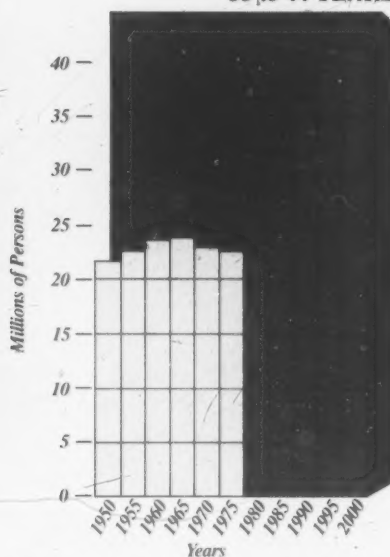
SOURCE: U.S. Bureau of the Census, May 1979

**FIGURE 4
AVERAGE ANNUAL
NUMBER OF BIRTHS**



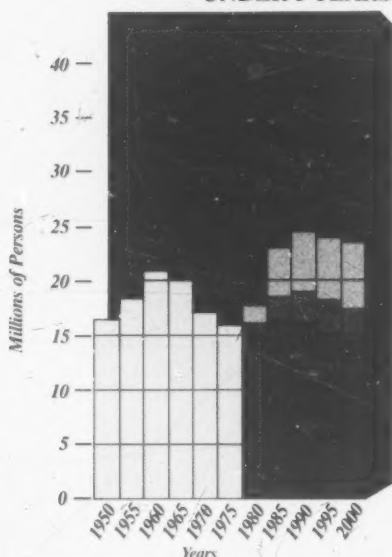
*Average is a composite of 1970-76 estimated births and 1976-80 Series II projected births.
SOURCE: U.S. Bureau of the Census, July 1977

**FIGURE 6
POPULATION
TRENDS BY AGE GROUP:
35 to 44 YEARS**



SOURCE: U.S. Bureau of the Census, July 1977

**FIGURE 5
POPULATION
TRENDS BY AGE GROUP:
UNDER 5 YEARS**



SOURCE: U.S. Bureau of the Census, July 1977

not necessarily cause a baby boom. Countless other factors relating to fertility rates, employment trends, and general alterations in the American social fabric have to be considered when forecasting future population growth and housing demand. We do not live in so simplistic a world where the mere existence of a record number of women in the prime child-

bearing-age span will necessarily result in a record number of children. In fact, instead of surpassing the average annual birthrate of the 1950s, the 1980's will probably fall short of, or at best only equal, the birth level reached during the first baby boom.

Until 1977, and for longer than anyone can remember, the birthrate was, except for the baby boom's burst of growth, on a protracted decline. This decline was related to a number of factors, including a decrease in size of the average American family, as well as the declining infant mortality rate. However, the first upturn in the birthrate since the 1950 baby boom occurred in 1977, possibly indicating the first sign of the coming sequel to the baby boom.

The imponderables in population forecasting are evidenced by the Bureau of the Census' multitude of population projections. It has hedged its projections by presenting three or four possible scenarios for population growth. These projections are based on a number of underlying assumptions concerning life expectancy, immigration, and fertility.

The alternative fertility assumptions take the form of three different series (see Figure 4). The Series II projection of future fertility corresponds closely to recent survey data on birth expectations of young married women. This series puts the growth of the U.S. population between 1976 and 2000 at 21 percent, from 215 million to 260 million persons. The annual population growth rate under

such an assumption would increase to 0.9 percent during the 1980's, up from the 0.8 percent annual increase experienced in the 70's. This rate of growth would, however, fall far short of the 1.7 percent rate of increase attained at the peak of the baby boom in the 1950's.

The assumptions for Series I and Series III were chosen to provide a range that appears likely to encompass future fertility. Under Series I, the population would increase by an almost rampant 31 percent between 1976 and 2000, while the Series III projections would see a meager 14 percent increase over the same period.

All of these different projections; low-, moderate-, and high-growth scenarios; indicate a birth bulge in the coming decade. Baby Boom II will definitely arrive throughout the 80's and culminate around 1990—however, the magnitude of the coming boom is, as yet, unknown.

The actual outcome of the population growth will radically affect the demand for housing in the coming decades. The slow-growth and eventually declining trend depicted in Series III would point to replacement housing needs, at best, while the high-growth forecast in Series I points to the need for continued additions to the housing stock *ad infinitum*.

But, while the offspring of the second baby boom will not enter the prime house-buying population until early in the 21st century, they will still have a profound effect on housing in the nearer term, the 80's decade.

The under five-year-old population group, which fell over 21 percent in size between 1960 and 1980, will grow an equal amount, over 21 percent, during the 80's, increasing over 17 percent between 1980 and 1985 alone. When compared with the preceding five years' growth of less than 1 percent, the 80's first half will be phenomenal (see Figure 5).

In the early 80's, day-care will join housing as a super growth industry. And from 1985 on, with the second baby boom children attaining school age, elementary schools should see a full-blown renaissance, as many of the persons presently involved with the "back to the city" movement are converted to the "back to a viable school district" movement, with a return to quiet neighborhoods, spacious lawns, and other suburban amenities.

As the present baby boom population matures, household size and income increases will most likely require a trading up in housing. Today's boom is buying into housing in the bargain basement with great expectations of future dream

houses. This group will be churning up the stock for years to come as changes in life-style necessitate changes in residence, usually at much higher prices. If the 25- to 34-year-old age group is characterized as the group buying the most housing, it is the 35- to 44-year-old age group (see Figure 6), into which the baby boom will soon move, that is characterized as buying the more expensive housing.

Data on first-time, as well as repeat, home buyers gathered by the U.S. League of Savings Associations, supports these predictions. The WWII baby boom population entered the housing market as first-time home buyers, who tend to buy lower-cost and older homes. About 50 percent of first-time buyers bought homes costing less than \$37,000

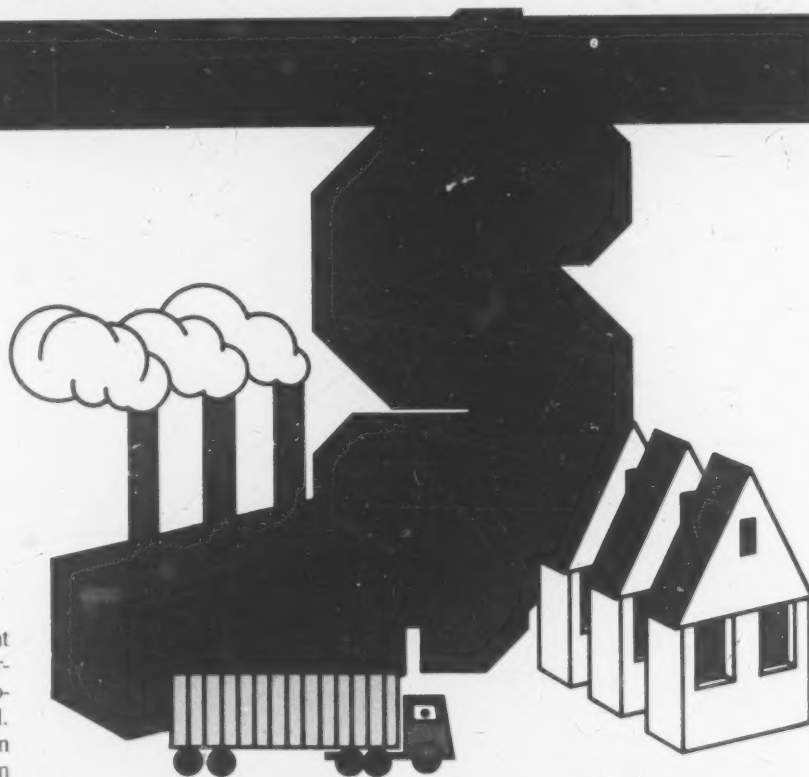
in 1977, while the median sales price for existing homes was \$42,900 and \$48,800 for new, single-family homes. A like percent of first-time buyers also bought homes built prior to 1959.

Home buyers do move up in the housing market, a fact confirmed by the U.S. League's research on repeat home buyers. For example, 68 percent of all repurchasers bought a home costing more than \$40,000 in 1977, while 30 percent bought homes costing more than \$60,000. Similarly, almost half of all repeat buyers bought homes built after 1970, while 29 percent bought new homes. This tendency on the part of repurchasers to buy higher priced, newer homes than first-time buyers do is partially explained by their respective socioeconomic characteristics. First-time

buyers tend to be younger than repurchasers; 21 percent of repurchasers versus 63 percent of first-time buyers are under 30. Repurchasers also have larger households than first-time buyers; 66 percent as opposed to 22 percent of first-time buyers have three or more members. And, first-time buyers tend to have lower household incomes and less accumulated wealth than repurchasers; 31 percent of repurchasers versus 50 percent of first-time buyers have household incomes of less than \$20,000.

Repeat home buyers are generally older and more well-off financially than first-time buyers; thus, they are ready and able to purchase higher priced housing. This is exactly what the offspring of the baby boom will do as they mature during the 80's.

80's ECONOMY



The general economic environment of the 80's will be largely determined by the various demographic trends previously mentioned. The extraordinary growth in population and household formation will underpin the economy with an almost unquenchable thirst for all forms of products and productive capacity.

Less inflation?

The 80's economic environment will also be largely determined by the trends already established in the 70's; it was a decade that took the economy on a vertiginous rollercoaster ride of booms and near-busts. Much of the underlying demand for goods and services was frustrated in the early 70's by recession, which left a considerable backlog of demand. Inflation came to the forefront throughout the 70's partially as a result of

this strong demand/slumping-supply imbalance, but also because of the legacy left by the 60's. This inflation legacy was composed of an ambitious social-spending program in the name of our Great Society, as well as a costly military action in Southeast Asia. Spending for these programs was not adequately matched by taxes, but was matched by inflation.

Adding insult upon injury in recent years was a recurring theme, or nightmare, entitled "The Energy Crisis." The abrupt increases in energy costs and, at times, constricted supply, were a radical departure from the prior decades' gradual

diminution of energy costs. The shock of this crisis did little to help the economy attain anywhere near its potential.

The problems that handcuffed the 70's have slipped into the 80's as well. And, while the near future has, perhaps, never looked bleaker with regard to energy costs and availability, there may be cause for some guarded optimism as well.

The economy, as measured by the ever-popular gross national product (GNP), will average between a 3.6 and a 5.1 percent real rate of increase during the 80's decade (see Table 1). Do not be surprised, however, to see radical shifts on either

**Table 1—Selected Economic Indicators
(Average Annual Rate)**

Year	Real GNP Growth ¹	Unemployment Rate ²	Consumer Price Increase ³
1950-54	4.6%	4.0%	2.5%
1955-59	3.3	5.0	1.6
1960-64	4.0	5.7	1.2
1965-69	4.3	3.8	3.4
1970-74	2.5	5.4	6.1
1974-79	2.9	7.0	8.1
1980-84*	3.6	6.7	6.7
1985-89	5.1	3.5	5.7

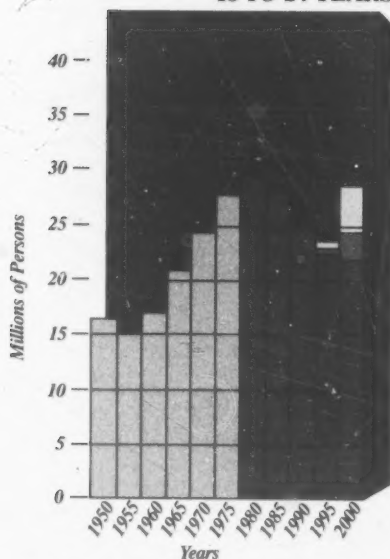
¹Gross National Product in 1972 Dollars; Average Annual Growth Rate. Source: U.S. Bureau of Economic Analysis

²Unemployment rate, total; Average Annual Rate. Source: U.S. Bureau of Labor Statistics

³Index of Consumer Prices, All items; Average Annual Growth Rate. Source: U.S. Bureau of Labor Statistics

*Source of 1980-89 Projections: Baseline Case Projection of the Joint Economic Committee of Congress, August 9, 1979

**FIGURE 7
POPULATION
TRENDS BY AGE GROUP:
18 TO 24 YEARS**



SOURCE: U.S. Bureau of the Census, July 1977

side of this modest average as the recession the 80's entered with is eventually replaced by an expansion of impressive magnitude. This economic expansion will only be kept within the realm of historic precedent by recurring productive capacity limitations, energy crises, and credit crunches. The modest average

increase in GNP throughout the decade may well obscure trends of increasing quality of life even without a proportionate increase in quantity, as a shift to efficiency and conservation makes for a much more effective use of resources.

The future GNP measure may well reflect a long overdue shift in the U.S. international balance of payments to a much more positive position, except, perhaps, in relation to the OPEC nations. The dollar's decline, relative to other currencies, has made U.S. products much more competitive abroad, while imports have become relatively more costly compared to goods produced in the U.S.

Productivity, simplistically measured as output-per-man-hour, may enjoy a boost in coming years due to possible technological advances, increasing productive capacity, and the maturation of large segments of the workforce. While it is particularly hard to second-guess technological advances and investment trends, a large segment of the workforce, specifically the WWII baby boom, will be entering its most productive years. After nearly a decade in the workforce, the baby boom's aggregate level of skills has increased markedly. The large levels of unemployment and especially underemployment that plagued the 70's, will give way to more optimal levels. Whereas the baby boom swelled the ranks of new job entrants in the last decade, there

will be fewer and fewer new entrants in the coming decade. The new entrants, typically between 16 and 24 years old and traditionally accounting for between 10-15 percent of the unemployed, will decrease markedly throughout the 80's as the number of 14- to 17-year-olds declines by 20 percent, and by 15 percent for 18- to 24-year-olds (see Figure 7). The 70's job market was literally swamped with new entrants. The coming slowdown in new entrants will contribute to the general slowdown in growth of the total labor force as well as to the declining unemployment rate. A process of assimilation has occurred in recent years: the 70's job entrants are now veterans of the working world.

With the maturation of the work force, lower unemployment rates can be expected. In mid-1979, when the unemployment rate stood at 3.9 percent for men 20 years and over, and at 5.8 percent for women in the same category, people of both sexes aged 16-19 years were experiencing a 15.3 percent unemployment rate. Of course, age is not the only factor; there will be cyclical economic downturns during the 80's that temporarily boost the rate, but for the most part, the average unemployment rate should range between 3.5 and 6.7 percent of the civilian labor force (see Table 1). Most of our guarded optimism arises from the tenuous premonition that inflation will be a much less formidable malefactor in the 80's than was the case during the 70's—at least in the majority of sectors.

Energy and incomes

While energy price increases continue to add upward pressure on the price indexes, a partially compensating reduction in per capita energy usage may mitigate the price rise. Smaller cars, energy-efficient houses, energy-pinching appliances—all phenomena of the post-energy crisis—will proliferate in the 80's. It will be through such conservation measures more than through an alternative energy source that real progress toward energy self-sufficiency will be made. But by the end of the decade even the more exotic energy alternatives may be cost-competitive with today's scarce and costly energy resources.

The energy crisis has led to premature energy obsolescence. As the cost of energy inputs has skyrocketed, there has been a shift by both consumers and producers to energy-efficient goods. While at first such a transition can leave certain energy-losers such as big cars and under-insulated houses with a substantially reduced market, energy innovations and

efficiencies can lead to years of booming sales. For example, small cars, pilot-free gas fixtures, home insulation, and virtually any energy saving piece of equipment, are all enjoying a boom.

Spiraling energy prices will not be the only inflation booster in the coming decade; supply shortfalls in housing and related industries will also put continued pressures on price increases. But rising productivity, in general missing from the 70's, and moderating food prices should keep inflation out of the double digits during most of the 80's. In fact, barring any number of possible economic catastrophes, the average annual growth rate of the Consumer Price Index may be held in the realm of 5.7 to 6.7 percent annually during the 80's—a marked improvement over the late 70's (see Table 1).

Rising productivity, and the full employment of the labor force, together with moderating inflation, mean that rising real incomes may make a comeback during the 80's. And with this comeback may come renewed consumer optimism and consumption.

Two-earner family trend

Consumer purchases will once again be a mainstay of the economic expansion as home building, home buying, and home furnishing become the hobby of thousands more households. Tacked on to the many and varied purchases relating to homeownership will be the purchases relating to child rearing, as Baby Boom II swells these households.

Even though increases in per capita real income lagged in the 70's, substantial increases in real income have occurred and will continue through the 80's for many households because of the increased incidence of dicephalism; that is, two-earner families. The number of families with incomes in excess of \$25,000, measured in terms of 1979 dollars, is expected to continue its marked increase in the coming decade. The percent of families in this advanced income group was approximately 20 percent of all families in the late 60's, 30 percent by the late 70's, and now is expected to reach 40 percent by the late 80's. It appears that more and more households are finding that, with regard to their financial position, two heads are definitely better than one. The number of working married women increased from 30 percent to nearly 50 percent by the end of the 70's, and is likely to swell to 60 percent during the 80's. Families' increased dependence on this second income is evidenced by the fact that, in recent years, probably 30 percent of all families that purchased

single-family houses contained secondary earners contributing between 30 and 50 percent of total household income. Moreover, the percentage of income spent on housing has increased over the years, reflecting most people's willingness to spend more for their houses. The traditional 25 percent limit of income spent on housing has inched up in recent years with households spending up to an additional 10 percent of their income in "hot" real estate markets. This increased spending on shelter probably reflects a thrifty transfer of investment into housing by many families who have been impressed by rising values and tax advantages associated with owning houses and very unimpressed by the return available on their savings in thrift institutions.

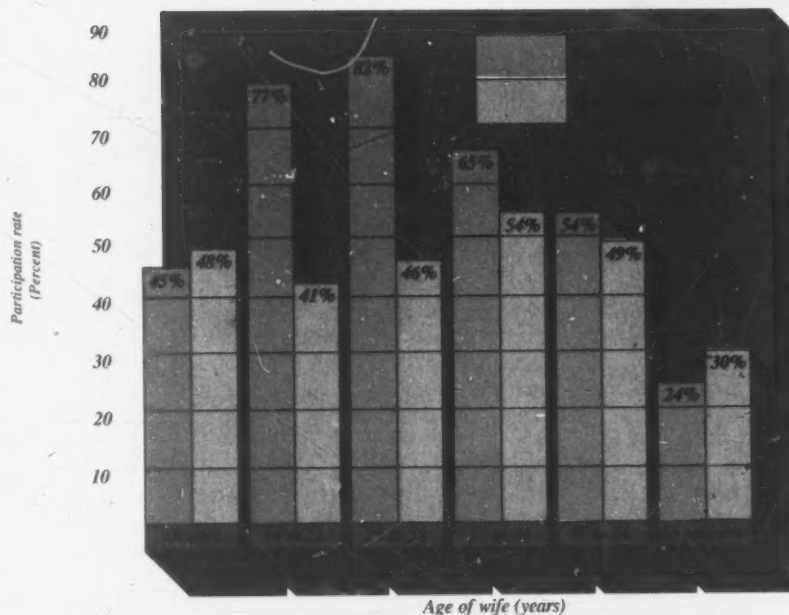
Will the arrival of Baby Boom II put an end to dicephalism, returning mother to the home, shrinking the labor force and causing a noticeable reduction in household income? Not likely. The labor force participation rate for presently childless married women between 25 and 34 years of age is 82 percent. For women with a college degree, that rate approaches 90 percent. These women are accustomed to working outside the home and are probably career-oriented, so if there is some amount of withdrawal by parents from the labor force in the early years of child rearing, they will probably return to the labor force in a short time for economic,

as well as career, reasons. The cost of day-care either through relatives, non-relatives, or day-care facilities is, in most instances, only a fraction of the increased income generated by a second working spouse. While the participation rate for married women with children under five years old may drop as low as 30 percent, that rate quickly climbs as the children grow up, reaching over 57 percent with 14- to 17-year-olds. In fact, married women who had one or more children under 18 years of age were just as likely to be members of the labor force as married women who did not have children (see Figure 8).

So the net effect of the second baby boom on participation rates and household income will probably be a temporary decrease, but then will return to high levels of participation as the expense of child rearing takes its toll. Interesting trends to be on the lookout for in coming years are gains in the frequency of both spouses working only part of the year or for more fathers to devote themselves to child rearing in the home.

With the maturing of the labor force, anticipated gains in productivity, and moderation in inflation, there will likely evolve, during the coming decade, an economic environment that allows the many potential home buyers to realize their potential by successfully bidding for that scarce resource—housing.

FIGURE 8
LABOR FORCE PARTICIPATION RATES
OF MARRIED WOMEN¹



¹Employment Status as of the week before the March 1977 Current Population Survey
SOURCE: Bureau of Census

80's CONSTRUCTION



The 1980's are likely to see a new golden era in construction, with building activity even surpassing the early 1970's levels. Housing, as well as commercial, industrial, and institutional construction, will benefit from the expanding demographic and economic trends envisioned for the 80's. And while such a boom era is probable, there will be a greater emphasis on energy and space efficiency throughout the 80's as resource scarcity and escalating construction costs mandate a fascinating dichotomy: an almost frugal golden age.

The demand for housing during the 80's will reach an all-time high as the number of persons in the prime house-buying age group peaks, and as their life cycle becomes much more family-oriented once Baby Boom II has arrived. Another factor affecting this demand will be strong gains in real household income during the decade. Traditional forecasts of housing demand based on simple projections of net household formation and losses of existing housing stock also need to consider the changing life cycle of the prime house-buying population. This population was largely responsible for the condominium boom of the 70's and, as families expand with the coming of Baby Boom II in the later half of the decade, a renewed interest in suburban living will emerge and the "back to the city" movement will ease. The one-bedroom condominium of the 70's will be useless to the family of the 80's and 90's with one or two children; the exodus to the suburbs will be reborn and with it will

come incredible pressures on the homebuilding and mortgage finance industries.

Supply demand ratio

An indication of the demographic input to this swelling demand can be seen in the ratio of the prime house-buying population to housing starts. The prime house-buying population (households whose heads are between the ages of 25 and 34 years old) was responsible for the purchase of approximately 50 percent of the single-family houses sold in recent years. It follows that substantial changes in this population group will have a marked effect on house sales and construction activity. This has been the case during the past decade and will continue throughout the 80's decade with the coming of house-buying age of the World War II "baby boom" population.

The ratio of population to housing starts has diverged from its relatively stable 15-year average of 15 persons per start between 1959 and 1973 to an average ratio of 21 for the last four years. This rapidly climbing ratio indicates a 40-percent increase in potential demand relative to actual supply. The ratio's 10-percent average yearly increase between 1974 and 1977 approximates the rise in house prices over the same period. The average sales price of new one-family houses actually sold increased from \$38,900 in 1974 to \$54,200 in 1977, a 39-percent increase.

When total housing starts are plotted against the 25- to 34-year-old population, recent and probable future demand-supply problems became obvious. From

1959 to 1970, housing production fluctuated closely with the increasing population, but extreme disparities developed in the 70's as housing production experienced some radical shifts. The boom started in 1970 and, supported, in part, by the Federal government's FHA 235 program, ended abruptly in 1973. The housing recession that followed was accompanied by expansion in demand as population growth and household formation continued at high levels.

The resulting gap between supply and demand for housing created during the 1974-75 recession is still with us today and will worsen during the early 1980 economic slowdown. It would have required two high-production years similar to 1978 to boost supply into the same ballpark as demand; and then, it would require starts in excess of two million units per year throughout the 80's to maintain the 16.5 person average ratio that existed between 1959 and 1977. In fact, the number of starts will have to increase in the following manner: 2.2 million in 1980, 2.4 million in 1985, and 2.5 million in 1990, to support the average historical relationship throughout the coming decade.

The hope that supply returns to a level compatible to demand is a very tenuous one at best. In fact, most projections of housing starts in the not too distant future indicate a downward trend, rather than a return to record levels. Starts are projected to drop from the two million-plus unit per year level of 1978 to 1.5 million in 1980, as housing activity succumbs to its traditional status as "odd-man-out" in

times of credit stringency. Housing production for the decade as a whole should advance from 1980's depressed level, reaching annual averages of between 1.9 and 2.4 million units. In terms of the ratio, it will probably stay in the neighborhood of 21 persons per start throughout the 80's, creating an average annual shortfall between expected and equilibrium starts of around 500,000 units (see Figure 9 and Table 2). Therefore, instead of a solution to the demand-supply problem in housing, we will witness a further exacerbation with continuing increases in housing prices as witnessed in the recent past. This shortfall, however, should be at least partly mitigated by expanding housing rehabilitation and manufactured housing activity—but not enough to dampen rampant price rises.

Housing costs and prices

Tight monetary policy notwithstanding, inflation will be with us throughout the 80's, especially in the housing sector where demand so far outstrips supply. Factors like the fast shrinking supply of readily developable land, rising labor, materials, and financing costs and an over-abundance of government regulation will all combine to push housing prices to higher and higher levels.

The average American household has no better hedge against the ravages of continued inflation than to purchase a house. So, as inflation continues, demand for homeownership increases. And while the general rate of inflation is expected to abate somewhat through the 80's, certain sectors with extreme supply and demand imbalances, like housing, will continue to see double-digit inflation rates.

The median price of new single-family houses sold between 1974 and 1978 climbed from \$35,900 to \$55,700, or 55 percent, and over the same period, the consumer price index increased about 32 percent. Not only does the single-family house offer a good hedge against inflation, it also provides various tax advantages that compound those benefits even more. With so many benefits accruing to homeowners, housing demand is expected to stay hot throughout the 80's—the same goes for house prices.

The Joint Economic Committee of Congress projects a \$125,000 price tag on a new home by 1988, based on a 120-130 percent expected increase over this time period. Its more pessimistic forecast would mean an average price of \$151,200. On a slightly brighter side, regulation reform and use of less expensive materials and methods could yield a \$6,000 per house savings in 1988, which

Table 2—Potential Housing Production Shortfall (in thousands)

Year	24-34 Year-Old Population Group	Equilibrium Starts ¹	Projected Starts ²	Potential Housing Start Shortfall
1980	36,172	2,188	1,722	466
1981	37,462	2,266	1,784	482
1982	37,861	2,290	1,803	487
1983	38,540	2,332	1,835	497
1984	39,203	2,372	1,867	505
1985	39,859	2,411	1,898	513
1986	40,445	2,447	1,926	521
1987	40,863	2,472	1,946	526
1988	41,118	2,487	1,958	529
1989	41,222	2,494	1,963	531
Average				
1980-89	39,274	2,376	1,870	506

¹Equilibrium starts based on the average ratio between 1959 and 1977 of the prime house-buying population to housing starts.

²Projected starts based on a scenario where the average ratio of the prime house-buying population to housing starts in the 80's is analogous to the experience of the ratio between 1974 and 1978.

Sources: Population Projections—Bureau of the Census, July 1977; Housing Start Projections—MBA Economics Department, December 1979

leads to an "optimistic" projection of about \$119,000 for an average new home (see Figure 10).

Such regulation reform should not be underestimated. Regulation from all levels of government and concerning all aspects of homeownership and construction significantly impacts all housing and mortgage activity. Here are just a few of these many regulations:

- land use controls
- building codes
- environmental protection requirements
- timber-cutting limitations
- lending restrictions and regulation
- usury laws
- rent control
- moratoriums on water, sewer and condominium conversion
- interest rate limitations on savings accounts and mortgage loans

While this abbreviated list does not reflect the full extent of the regulations surrounding homeownership and construction, it does illustrate the highly circumscribed nature of the housing market.

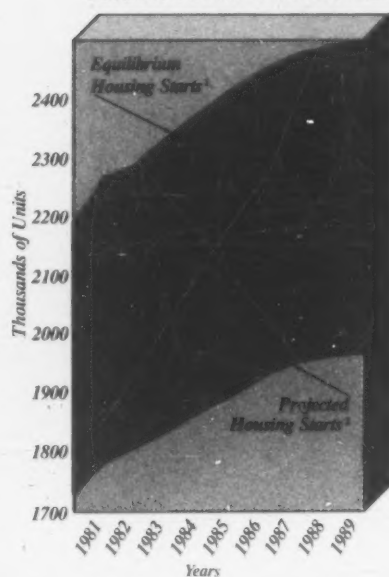
Do not be too surprised if the number of housing-related regulators and their regulations continue to expand at an al-

most exponential rate throughout the 80's. Whereas environmental protection was the call to arms for regulators in the 70's, with added land use restrictions and impact statement requirements, the 80's may well be the decade of energy conservation with environmental concerns forced into the back seat. More restrictive land use regulations, building codes to promote energy efficiency, as well as possible energy impact statements and a host of other potential regulations could further encumber the housing markets.

Also, an early 80's battle will probably develop over the Building Energy Performance Standards, which the National Association of Home Builders has estimated could boost the building cost of multifamily units by 3 to 5 percent and could add from 75 cents to \$1 per square foot to the price of single-family houses. The battle arises over the cost-effectiveness of these energy savings, which may fall far short of the cost of several mandated energy-saving improvements.

The 80's may also see the proliferation of a new underwriting emphasis that includes energy considerations, along with other underwriting criteria. Qualifying mortgagors, based on monthly PITI&E

**FIGURE 9
POTENTIAL HOUSING
PRODUCTION SHORTFALL**

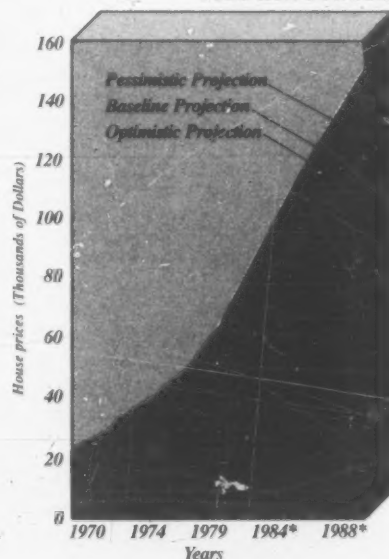


¹Equilibrium starts based on the average ratio between 1959 and 1977 of the prime house-buying population to housing starts.

²Projected starts based on a scenario where the average ratio of the prime house-buying population to housing starts in the 80's is analogous to the experience of the ratio between 1974 and 1978.

SOURCE: MBA ECONOMICS DEPARTMENT
(See Table 2)

**FIGURE 10
NEW HOUSE
MEDIAN PRICES**



*The projections are based on the following annual inflation assumptions: pessimistic case 9.5%, baseline case 6.5%, and optimistic case under 5%.

SOURCES: Pre-1980 Prices: U.S. Bureau of the Census (Median New One-Family Sales Price). Post-1980 Prices: Joint Economic Committee of Congress (Median New House Prices)

(payments of principal, interest, taxes, insurance, plus energy-related costs) amounts, would facilitate the financing and general affordability of costly energy improvements. Savings in monthly household operating costs, resulting from energy improvements, would be reflected in the PITI&E: the lower the E component, the more affordable the house. The inclusion of reduced energy operating costs into the underwriting process will, at least partially, compensate for the higher principal and interest payments created by the added front-end costs of the energy improvements. The coming decade should see considerable improvement in both the technological and financial appraisal of energy-saving improvements and enable their proper reflection in the underwriting process.

Many of today's myriad of regulations result in added benefits, if not for the individual then at least for the community. At the same time however, many of these regulations result only in delay, adding to housing cost without any compensating benefits. Continued pressure for government to deregulate or eliminate requirements that are costly but non-productive is a start toward reducing inflation in house prices. Similarly, deregulation would encourage greater housing production and would, in turn, reduce the "demand pull" inflation caused by relatively low levels of production.

Housing shape and size

A major housing trend that may emerge during the 80's in response to energy and cost considerations and the shrinking size of households is the possible reduction in size of the average new house. With this size-reduction will come increased emphasis on energy efficiency (even without government regulation). Trends in land cost and availability, as well as public service provision, will tend to have an aggregative force: increasing densities and reducing sprawl. While certain builders will market "no frills" housing, there will be continued emphasis on amenities and on shared amenities like swimming pools and tennis courts. Homeowner associations will proliferate.

While the shape of things to come will be more compact for the most part, the housing industry may make progress toward attaining a "liveable density," whereby privacy and private ownership flourish on many more than one unit to an acre. Townhouses with private courtyards, soundproofing, good design (both inside and out), and a population that is sympathetic to living with density and enjoying the increased variety of amenities that density allows, will contribute to

this. Visions of megastructures are not likely. Instead, townhouses and other forms of moderate density will be the likely form. Of course, the single-family detached structure will remain as the predominate and most revered structure type. But, as mentioned, the single-unit structure of the future will be much more compact in building, as well as in site requirement; it will be much more efficient and much more expensive than ever before.

For the most part, the shape of things to come will look familiar. Since new construction will fall far short of the needs of a rapidly growing home-buying population, existing housing structures will be used more and more intensively. The 80's will see the continuance and expansion of the boom in rehabilitation, renovation, and re-use of buildings.

The surging population group of first-time buyers usually enters the housing market as buyers of existing homes and will provide much of the impetus to the renaissance of the existing housing stock. Buildings in disuse or underuse will be reborn, factories and warehouses will become condos and shopping malls, the existing stock will be upgraded, modernized, and "energized" to the tune of many billions of dollars. In fact, home improvement loan volume is likely to exceed new home loan volume by the end of the 80's, with a marked impact on both primary and secondary mortgage markets.

Most of tomorrow's housing will be today's housing, but rehabilitated. And much of the new housing will be dense like yesterday's townhouses; the house of the future: the spitting image of the house of the past.

Technological advances, which are such an unknown when looking into the future of so many other industries, are not as critical for homebuilding—at least not yet. Wherefore art thou low-cost modular fiberglass house with an independent solar energy system and chemical toilets? Nowhere. The labor-intensive housing industry will stay labor-intensive. Today's building materials will be, for the most part, tomorrow's materials; mass production will not be massive. There may be a continued expansion in the use of certain mass-produced components in home building, which will yield a "modified" stick built house, but a manufacturing revolution in the housing industry is not likely this decade. This is not to say that manufactured housing, *a la* mobile home shipments, will not retain an important share of the new housing market and even gain greater market acceptance as the manufactured housing

development emulates standard stick-built subdivisions. But mobile homes will not be immune to rapid price increases, which will rise in step with land and materials prices, in general.

Income producing properties

The boom in construction will not be limited to housing; income producing and institutional properties will enter their own golden-age, or perhaps more correctly, their own "white-collar age." The baby boom has moved out of institutions of higher learning into institutions of higher earning: the world of white collar work. This rapid influx of young office and retail workers has contributed to the rapid expansion in office and retail build-

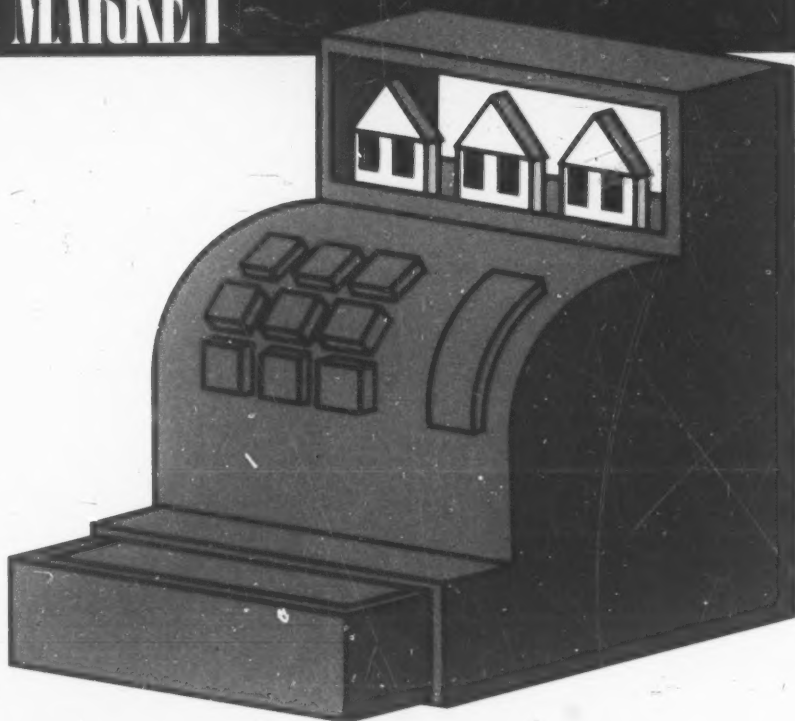
ing. The hectic house construction activity in recent years, together with continued suburbanization, has given great impetus to retail store construction, which, in turn, supports warehouse building, and, finally, additions to productive capacity, including manufacturing-related structures.

The energy emphasis will play a substantial role in income producing properties as builders are required to maximize energy efficiency to avoid energy obsolescence only a few years down the road. As the second baby boom enters the primary education system late in the 80's, the elementary schools of their parents will have to be energy-enhanced, having been built in a time of declining energy

costs. This is also true about the majority of the housing stock built prior to the energy crisis. The energy improvements required on many existing structures will come close to costing as much, if not more, than the original structures cost, especially on structures more than ten or 20 years old.

Construction activity in the 80's should reach extremely robust levels from its present languishings, despite the ever-increasing environmental, economic, and, now, energy constraints placed on the industry. The fast-emerging demand for most structure types, both residential and commercial, should be able to coax record construction activity—at record cost—in the coming decade.

80's MORTGAGE MARKET



The tremendous demand for housing, both teamed with and contributing to continued inflation in house prices, will detonate the 1980's mortgage and capital markets. The volumes of funds necessary for future mortgage financing will be expanding to almost unimaginable levels, requiring further radical restructuring of the mortgage markets.

Of course, a general restructuring in the mortgage markets isn't anything new. The WWII housing boom in the 50's, continued expansion in the 60's, and the boom-bust environment of the 70's have forced the mortgage market to continually expand, taking on new players and institutions, including an entire secondary market structure. While the mortgage market has evolved to become the largest capital user in the economy, much, much more capital will be required in the

near future to facilitate the tremendous growth expected in the 80's.

The mortgage market metamorphosis has already started and must continue, and new innovations must be continually developed and refined. The growth experienced in the past few decades, which transformed the mortgage market, was only a prelude to what is to come in the 80's. If housing starts are provided to meet the rapidly expanding demand of the 80's, it is not unreasonable to project annual origination volumes in excess of \$500 billion by 1985, which is more than twice the expected 1979 volume and almost nine times greater than 1970's level.

How are today's lending institutions going to generate this kind of money, when today's volumes are difficult enough to sustain? At the end of the 70's, it looked as though personal savings, thrift institutions, the traditional source of most mortgage funds, were going to be placed on the endangered species list, along with the thrifts themselves.

Plight of the thrifts

While our energy sources have been subject to premature obsolescence, the financial sector is similarly experiencing accelerated obsolescence because of an inflation crisis. People on fixed incomes

are in dire straits, as are institutions with portfolios of older fixed income assets.

Savings institutions, especially, are confronted with this inflation-induced obsolescence and, in turn, are faced with what they would probably consider premature extinction. National policy, aimed at holding down the cost of lendable mortgage funds via interest rate ceilings and, thereby, subsidizing mortgage lending at the cost of the traditional saver, is no longer viable. Savers, when given the option, will seek to maximize their return on their investments; hence, the massive disintermediation that has, at times, plagued the savings institutions. At such times of rising interest rates and prices, there is little or no incentive to save, even less to save at the below market interest rate offered at thrifts, except for certain liquidity needs or because of special inducements like toasters and dishes.

The savings institutions' problems are further compounded when the ratcheting up of interest rates plunders the value of their fixed-income mortgage portfolio. Thrifts are then caught in a very uncomfortable squeeze: they fail to attract new funds or actually experience disintermediation when they want to originate high-yielding mortgage instruments. Their ability to attract additional funds is limited by interest rate ceilings, and their willingness to lend is stifled by usury ceilings for mortgages. Considering all their problems, one begins to wonder if the traditional thrift institution is as obsolete as a V-8 gas guzzler.

A return to a more free-market orientation, which government always manages to preempt, may go a long way toward the revitalization of thrift institutions and the mortgage markets in general. A paradox is likely to develop in the 80's as the thrifts both battle to stave off extinction caused by excessive regulation and yet are reluctant to embrace the free market place. Their many decades of sheltered operation have left the thrifts a little timid to try the fast-moving waters of the market.

Restructuring the mortgage market

The solution to the energy crisis is a general restructuring of energy sources and uses. The same general solution applies to the financial crisis: an aggressive restructuring of sources and uses of assets and liabilities, the tapping of wider capital sources, and shifts to alternative mortgage instruments are needed to survive in a climate of inflation and capital scarcity.

The key to the near-term restructuring and revitalization of the mortgage market

lies largely within two related areas: regulation and securitization. A third area, agglomeration within the mortgage and real estate industries, will also contribute to the restructuring later in the decade.

Regulation and other forms of government intervention in the mortgage and housing markets span a wide spectrum, from being very useful to being extremely detrimental in the operation of the markets. In seeking to have one's cake and eat it, too, it is hoped that positive forms of government intervention, such as loan guarantees and subsidies for the poor, will remain throughout the coming decade. On the other hand, it is also hoped that obsolete or harmful government intervention, such as deposit and mortgage interest rate ceilings, are

Savings institutions, especially, are confronted with this inflation-induced obsolescence, and, in turn, are faced with what they would probably consider premature extinction.

phased out early in the decade so that lenders can compete to attract the necessary funds into the exploding mortgage markets.

The growing realization that the usury ceiling is a very large impediment to the efficient flow of real estate capital should contribute to the continued relaxation of such ceilings during the 80's. The ceilings' obstruction of flows will create added impetus for indexation of the ceilings, and Federal exemption from state usury ceilings for FHA-insured mortgages, VA- and FmHA-guaranteed mortgages, and conventional mortgages eligible for sale to FNMA, FHLMC, and GNMA.

The mortgage markets will exert tremendous pressure on the capital markets throughout the 80's as mortgage lending surges and as traditional sources of funds find it almost impossible to keep pace with such huge loan demand. The national secondary market will be called on by more and more lenders and investors alike as a conduit for mortgage capital. The existence of diverse and often inconsistent state and local real estate laws and procedures will hinder the free flow of capital across state lines, thereby reducing its availability and/or adding substantially to its cost.

Pressures will mount throughout the 80's to refine the relatively puerile secondary market, to facilitate the fast-growing mortgage demand. The move toward uniformity in the mortgage markets will spread. First, uniform loan

documents—FHLMC's and FNMA's adoption of uniform documents was a major step—and then perhaps uniform foreclosure and settlement procedures. The goal of such uniformity, as with a similar move toward uniformity in the commercial credit area (Uniform Commercial Code), is to modernize and improve the existing system so that it can handle the strains of a fast-expanding market. Even bringing uniformity, and especially some realism, to the presently disarrayed usury laws may help housing consumers obtain mortgage financing during periods of tight credit, as well as allow lenders to provide such financing at market rates. These moves toward uniformity will make for a more efficient mortgage market and facilitate the flow of funds to this expanding sector.

The relaxation of prohibitions on a multitude of alternative mortgage instruments in the late 70's has placed both borrowers and lenders in a much stronger position to realize their investment objectives. Many consider the standard fixed payment mortgage to be practically obsolete in the current and prospective inflationary climate. And continued emphasis on graduated payment mortgages, as well as variable rate mortgages, will facilitate the proper operating of the mortgage market for thousands of first-time house buyers and for lenders, as well.

Regulation Q will not last the decade; it is already being circumvented; practically 40 percent of all savings deposits are now being placed in money-market certificates, which reflect the market. The extension of the market-related rates to smaller savers will effectively do away with Regulation Q's limitations. The resulting rise in cost of lendable funds will necessitate higher mortgage rates, especially if thrifts are still constrained to the mortgage lending business.

No one appreciates the securitization of the mortgage market quite as much as mortgage bankers. Their mortgage sales through such means will probably exceed 50 percent of total sales for both government-backed and conventional mortgage-backed securities (CMBS) during the 80's. The investment quality of soundly underwritten conventional mortgages is well documented, so the acceptance of the CMBS is likely to accelerate throughout the 80's. The volume of conventional mortgage-backed securities will probably surpass the volume of government-backed issues by mid-decade.

The securitization of the mortgage market may contribute to a healthy form

of disintermediation if the sale of these securities is extended to small investors. Such securities would be high-yielding, low-risk investments, which are still reasonably liquid. Of course, savings institutions could react by issuing a variety of participation certificates to their "depositors" for attracting funds, originating, servicing, and passing on most of their portfolio before inflation devalues it.

Mortgage bankers have had the right idea all along, and it seems that more and more institutions may be getting into the act. Savings and loan associations, which are second only to GNMA as investors in mortgage banker-originated loans, are beginning to do (or acquire) more and more of their own mortgage banking operations.

The introduction of the money-market certificates may have slowed the S&L's venture into secondary mortgage markets since the thrift industry found the new certificates to be an effective source of funds and was not forced into secondary market sales to the extent that would have occurred without such a certificate. However, the thrift industry still finds it quite profitable to deal in secondary market operations; therefore, mortgage bankers can expect continued expansion of the thrifts into their domain.

The advent of interstate branching for deposit institutions would provide them another competitive advantage in the mortgage banking business. A nationwide branch network would not only increase the ability of deposit institutions to attract funds but would provide the basis for loan origination and regional servicing centers that have traditionally been the mortgage banker's domain.

Changing institutional structures

Barriers between various segments of the domestic and international capital markets are giving way to the tremendous capital requirements of the mortgage lending industry. The 70's saw the maturation of the GNMA mortgage-backed security (MBS), which offered an attractive yield, virtually risk-free, to nontraditional mortgage money sources like the pension funds.

While the MBS competed for long-term capital, the Department of Treasury was confronted with some convincing competition for short-term funds in the form of the money-market certificate (MMC). While the MMC was probably more instrumental in dulling disintermediation than making further inroads into new segments of the capital market, it probably represents the wave of the future as an example of the more aggressive tactics that depository institu-

tions will be forced to take, not only to hold their ground against competing investments, but to actually break new ground.

During the coming decade, America's voracious appetite for mortgage funds will likely extend into the farthest reaches of Europe, as well as the Mid- and Far East, virtually anywhere with "bargain capital" relative to the U.S. capital market. A new financial instrument, dubbed a collateralized certificate of deposit (CCD), may soon be used widely by S&Ls seeking to tap this huge pool of capital.

The proposed FHLBB regulations for these CCD's limits their sale to non-

fered units in a six-month savings fund in minimum denominations of \$1,000 at rates twice as high as regular savings accounts. Also, Merrill Lynch has been sued in Colorado by the State Commissioner of Banks for operating as a bank through its money management account.

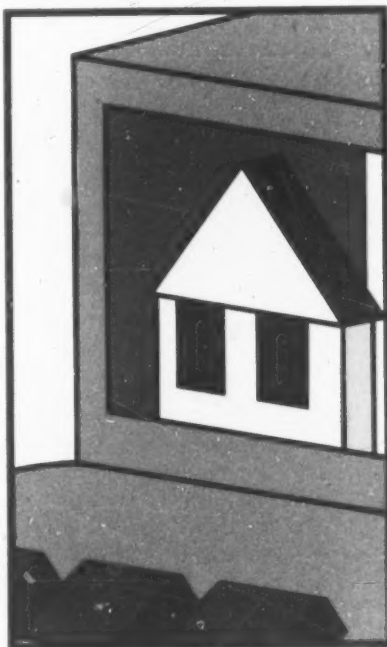
The key to the near-term restructuring and revitalization of the mortgage market lies largely within two areas: regulation and securitization.

This account allows a Merrill Lynch customer to write checks to be covered by a transfer out of the customer's Merrill Lynch account into their demand deposit account at an Ohio bank. The customer can also borrow against his account to the extent of his eligible margin on investments held in the account. This is relatively new and promises to be another formidable form of competition for banks and thrifts.

Such competition could lead to a reduction in mortgage funds available from banks and thrifts and may reduce the importance of thrifts as mortgage banker customers. Similarly, increased competition for funds could force thrifts to become even more involved in mortgage banking-type operations themselves, in order to maintain their profits and provide for their capital requirements, which are becoming more and more strained every year.

Agglomeration

Another possible form of mortgage market restructuring could take the form of the agglomeration, or the integration of most, if not all, of the players in the savings and mortgage market. The sleeping giant in the arena of possible agglomeration could be a retail store, or an investment banker. One prominent retailer has developed an almost unbelievable financial network throughout the United States. This network includes a savings and loan association, life and casualty insurance operations, a private mortgage insurance company, and retail stores or mail order facilities available in every state. If this network so decided, and if regulators and legislators so permitted, it could open mortgage origination operations throughout the country overnight, and sell the loans to their S&L, life and casualty insurance companies, pension fund, or profit-sharing trust. It could even insure the loans through its mortgage insurance company, while providing credit life policies to its borrowers.



U.S. investors in the eurodollar market and requires a minimum \$100,000 denomination, *a la* our domestic jumbo CD's. These CCD's would be collateralized, actually over-collateralized, by mortgage loans, in the range of 150 to 175 percent of principal to achieve top credit ratings. Other mortgage-backed instruments to tap the international market will evolve over the coming years, so that more and more lenders can participate in the global capital market.

Savings market

The investment banker, who was involved in almost every major innovation in the secondary market in the late 70's, will probably become increasingly involved in the competitive side of the savings market into the 80's. Firms such as Merrill Lynch and Dean Witter, have of-

CALL JACK

1-800-328-1950

Jack's manning the hotline with exciting information for people who loan money. Information about insurance. That's right, *insurance*.

It's called CCLI... Creative Customer Loan Insurance.

Underwritten by Omaha Financial Life, a Mutual of Omaha Company, this program features the kinds of protection most customers want *and the kinds of conveniences busy money lenders need.*

Check these coverages: Credit Life, Credit Disability, Mortgage Life, Mortgage Disability, Term Life, Accidental Death, Cancer, Hospital Indemnity.

We team them up with easy-to-understand policies, uncomplicated forms, simplified billing statements, professional personnel training, and proven sales aids.

But that's not all. Because Direct Mail is the key to so many customer loan insurance programs, we maintain a mailing service that puts information in loan customers' hands *quickly and conveniently.*

Creative Customer Loan Insurance... get all the facts today. Call Jack.

Jack Fortner, Vice President Sales, Omaha Financial Life Insurance Company.

Omaha Financial
Life Insurance Company
A Mutual of Omaha Company

This retailer could easily finance such an operation by paying interest on credit balances on charge cards and, thereby, maintain the entire operation within one holding company. Just imagine their loan origination office located appropriately between the appliance and hardware department in each of their stores in America! Not a bad location.

It is also conceivable that such a network would not establish its own loan origination system, but rather establish correspondent relationships with mortgage companies throughout the country. Their mortgage correspondent might even qualify for an employee's discount,

On the servicing side, it is possible that credit systems such as Master Charge, Visa, or American Express could use their existing credit facilities for mortgage loan servicing.

no small benefit in such an agglomeration of businesses.

Even though the current regulation and statutory environment does not permit such a business empire to perform completely as hypothesized, this regulatory environment could change in response to various market changes. Even so, several organizations already have the capability to become integrated financial conglomerates operating in the 1980's mortgage market.

On the servicing side, it is possible that credit systems such as Master Charge, Visa, or American Express could use their existing credit facilities for mortgage loan servicing. Because of economies of scale in loan servicing, these nationwide systems could easily enter the mortgage loan servicing business and may even be able to reduce their servicing fee to such an extent that the mortgage banking business—as we know it today—would practically disappear.

In conjunction with the financial conglomerates being established, and as perhaps a prelude, we are seeing a radical agglomeration of real estate agencies. A recent study sponsored by the National Association of Realtors predicts that within 10 or 15 years, national franchises, such as a Century 21-type operation, and large publicly-owned companies, will handle as much as 80 percent of residential property transactions in major markets. It is also predicted that increased computerization of the industry will lead to more single-stop selling; combining brokerage, mortgage title, warranty, mortgage insurance, escrow, and home sale guarantee. National franchise opera-

tions could be aligned with a conglomerate to provide a natural loan origination tie-in to a full-scale mortgage operation. To the extent the vertical integration of a financial conglomerate is complete, the need for the traditional mortgage banking operation will be substantially reduced.

Securitization, agglomeration, vertical integration—you may be thinking that these ideas are far-fetched. But, they are not simple daydreams, and many have already occurred. And even our daydreams—one-stop shopping for most real estate needs via home video, a variety of forms of electronic transfer—might be innovations of the 90's. Although the changing environment of the mortgage banker is basically evolutionary, we have witnessed some revolutionary changes in recent years, such as the swift decline of life insurance companies and the rapid rise of Ginnie Mae as mortgage banking customers.

While this evolution is not a death knell for the mortgage banker, it is a challenge. The mortgage banker must be ready for, and part of, the changes that are taking place in the mortgage market if he or she is to survive.

Cost of leadership

During the 80's, mortgage bankers cannot sit idly by, watching the evolution of their industry; they must take the lead and get involved in all aspects of the mortgage market. Mortgage bankers could develop correspondent relationships with major financial conglomerates, and expand the use of mortgage-backed securities. There is much that mortgage bankers can do in the way of innovative

The mortgage banker must be ready for, and part of, the changes that are taking place in the mortgage market if he or she is to survive.

leadership to survive and even prosper throughout the coming decade. However, there is a cost of leadership.

The mortgage banking industry will have to develop a greater variety of capital sources and will have to provide professional management that can innovate, and at the same time, improve on existing techniques. Increased educational training and exposure to new ideas will prove to be the lifeblood of the mortgage banking industry over the coming years. As competition becomes more sophisticated, so must the mortgage banking industry—it will have to if it hopes for a bright future. □

Mortgage Market Trends

Prepared by MBA's Economics Department

March 20, 1980

Most housing market participants these days, reflecting on the sorry state of affairs in the housing market itself, are justifiably depressed. Today's real estate markets, which should be running at peak capacity to supply an ever-growing need, are instead being crushed under the weight of a restrictive monetary policy. Both construction and long-term mortgage interest rates bound to new records at least every other week; real consumer incomes continue to falter; housing sales volumes ebb; and "for sale" inventories, housing's "waistline," expand.

Seasonally adjusted new house sales have already dropped over 30 percent from their October 1978, 900,000-unit cyclical peak, to a 594,00-unit annual rate in January 1980. Over the same time span, the adjusted annual rate of inventories of houses for sale declined less than 2 percent, to a 400,000-unit level. This stickiness in inventory levels relative to fast falling sales has pushed the months' supply of houses at the current sales rate, a popular inventory measure, to an adjusted 7.9 months, recalling inventory levels last seen in early 1975.

The stickiness in the inventory of units for sale will give way in coming months as the production of new housing continues to slow. Housing starts, having stepped down from mid-1979's 1.8-million-unit annual rate to February's 1.3-million-unit level, still have not reached the basement, which may be below the one-million-unit level. While the construction slowdown will reduce the addition of units to the "for sale" inventory, the inventory measure linked to sales volumes is not likely to retreat so easily.

If there were any optimists left in the housing market, they would probably point to the 0.9 percentage point drop in the sales to inventory measure in January as the beginning of a return to lower inventory levels. This improvement in the inventory measure, however, may be as short-lived as its cause--January's surge in new home sales early in the month. Sales of existing housing, an important ingredient for a strong new house market, did not share new housing's January strength. In fact, existing home sales, at a seasonally adjusted annual rate, have fallen over 17 percent since October 1979, to a 3.2-million-unit rate in January--the lowest level in almost two years.

With mortgage rates moving to between 15 and 17 percent, it can only be expected that sales of both new and existing housing will continue to falter. To the extent that the deterioration in house sales outpaces the decline in housing inventories--a likely occurrence through mid-year, the inventory to sales ratio will maintain a relatively high profile.

Thomas R. Harter, Chief Economist

MORTGAGE MARKET TRENDS—APRIL 1980

RESIDENTIAL STRUCTURES, BY UNIT TYPE

(Units in thousands)

VALUE OF NEW CONSTRUCTION PUT IN PLACE

(Dollars in millions)

HOUSE SALES

(Units in thousands)

Year and Month	PERMITS 16,000 ISSUING PLACES									HOUSING STARTS									Seasonally Adjusted Annual Rate			EXISTING HOUSES ¹	NEW HOUSES		
	Actual			Seasonally Adjusted Annual Rate			Actual			Seasonally Adjusted Annual Rate			1 Unit	2 + Units	Non-Res	Sold	Available For Sale	Months Supply at Current Rate							
	Total	1-4 Units	5 + Units	Total	1-4 Units	5 + Units	Total	1-4 Units	5 + Units	Total	1-4 Units	5 + Units													
1978	129	91	38	1,724	1,245	479	158	122*	36	2,111	1,661	450	118,608	64,884	14,024	39,700	299	53	422	8.0					
NOV	104	71	33	1,664	1,285	379	120	89	31	2,052	1,616	436	120,739	66,243	14,251	40,245	233	51	421	8.3					
DEC																									
1979																									
JAN	81*	56	25	1,324	959	365	88	64	24	1,727	1,298	431	112,999	61,407	13,208	38,384	243	53	411	7.8					
FEB	84*	57	27	1,321	878	443	84	64	20	1,469	1,090	379	115,191	62,308	14,663	38,220	261	58	399	5.3					
MAR	141	103	38	1,531	1,103	428	153	120	33	1,800	1,394	406	119,211	61,376	14,967	42,868	334	73	416	5.7					
APR	139	106	33	1,437	1,082	355	161	131	30	1,750	1,386	364	118,621	59,868	16,108	42,645	333	72	417	5.7					
MAY	162	111	41	1,618	1,163	455	189	144	45	1,801	1,349	452	120,904	59,735	15,932	45,248	371	69	426	6.2					
JUN	156	112	44	1,639	1,144	495	193	147	46	1,910	1,399	511	124,452	60,363	17,800	46,789	344	64	420	6.6					
JUL	138	104	34	1,528	1,136	392	164	130	34	1,764	1,352	412	125,507	60,554	17,196	47,757	343	66	421	6.3					
AUG	152	111	41	1,654	1,181	473	172	133	39	1,798	1,389	399	125,398	60,522	17,775	47,101	377	69	419	6.1					
SEP	140	90	50	1,775	1,166	609	164	117	47	1,874	1,360	514	125,801	60,352	18,726	46,723	314	62	414	6.7					
OCT	141	96	45	1,542	1,084	478	169	122	47	1,710	1,268	442	127,858	60,158	18,467	49,533	329	55	416	7.6					
NOV	98	64	34	1,263	850	413	119	82	37	1,522	1,094	428	127,546	58,799	19,081	49,666	255	39	412	10.5					
DEC	81	52	29	1,244	899	345	92	65	27	1,548	1,165	383	131,089	57,995	20,774	52,300	197	34	405	11.8					
1980																									
JAN	75	52	23	1,264	882	382	73	57	16	1,424	1,137	287	132,236p	56,573p	21,439p	54,224p	209	43p	395p	9.1p					
FEB	77p	53p	24p	1,163p	803p	367p	80p	55p	25p	1,334p	880p	448p	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.					
12 months																									
1979	1,513	1,072	441				1,748	1,319	429								3,701	714							
1978	1,800	1,313	487				2,020	1,558	462								3,863	817							
1977	1,689	1,246	443				1,988	1,574	414								3,547	820							
1976	1,280	980	300				1,538	1,250	288								3,002	647							

RESIDENTIAL STRUCTURES, BY REGION

(units in thousands)

CONSTRUCTION STATUS

(units in thousands)

Year and Month	PERMITS 16,000 ISSUING PLACES								STARTS								UNDER CONSTRUCTION			COMPLETIONS		
	Actual				Seasonally Adjusted Annual Rate				Actual				Seasonally Adjusted Annual Rate									
	North East	North Central	South	West	North East	North Central	South	West	North East	North Central	South	West	North East	North Central	South	West	Total	1-4 Units	5+ Units	Total	1-4 Units	5+ Units
1978	16	28	48	36	196	355	670	503	17	43	62	49	179	543	852	537	1,371	900	471	167	134	33
NOV	13	16	39	36	198	327	612	527	14	19	47	39	236	436	773	607	1,310	848	462	170	136	34
DEC																						
1979																						
JAN	10	8	35	29	189	198	500	437	8	7	45	28	257	258	782	430	1,270	813	457	129	100	29
FEB	6	10	37	31	140	229	506	446	6	7	42	29	180	213	647	429	1,223	776	447	126	7	29
MAR	12	25	62	42	143	294	646	448	12	26	75	40	190	368	780	262	1,216	777	439	140	113	36
APR	14	31	51	43	142	297	543	455	15	34	65	47	171	356	692	531	1,228	793	435	142	111	31
MAY	18	37	60	48	181	328	616	493	18	50	72	51	173	396	734	498	1,259	831	438	156	113	43
JUN	18	34	59	45	199	332	636	472	19	44	79	51	178	371	862	499	1,283	837	446	166	130	36
JUL	15	27	51	45	161	281	585	501	18	36	68	43	174	356	762	472	1,300	852	448	151	116	35
AUG	15	30	50	47	147	310	664	533	20	39	74	40	176	388	770	454	1,301	860	441	159	123	36
SEP	19	29	54	39	217	337	704	517	13	39	67	46	164	392	765	553	1,283	850	433	181	125	36
OCT	14	28	59	38	151	271	673	447	21	35	73	40	172	317	765	456	1,274	837	437	174	135	39
NOV	13	16	42	27	182	191	557	363	19	20	53	27	170	249	716	387	1,226	794	432	165	121	44
DEC	10	12	34	25	144	224	517	359	10	15	40	27	156	326	667	399	1,142	719	423	174	139	35
1980																						
JAN	8	8	39	23	116	221	577	350	5	6	40	22	183	221	683	337	1,094p	684p	410p	124p	93p	31p
FEB	6p	8p	40p	23p	133p	182p	536p	312p	2p	8p	47p	23p	70p	226p	706p	332p	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 months	164	287	603	459					179	312	773	469								1,872	1,423	449
1979	194	388	668	550					200	451	824	545								1,868	1,486	382
1978	182	403	562	546					201	464	783	538								1,504	1,200	304
1976	150	317	400	412					170	401	569	400								1,245	1,004	241

INTEREST RATES AND YIELDS

Year and Month	1-4 UNIT MORTGAGES						APARTMENTS ¹	CONSTRUCTION LOANS ¹ ALL TYPES	FNMA		GNMA Current Securities Yield ¹	SELECTED SECURITIES				SPREADS (Basis Points)			
	FHA Opinion Survey			FHLBB Survey					FIMA Auction Yields on 4 mo. Commitments ¹ FHA VA Conv				Aaa Utility New Issue	U.S. Gov't		Prime Commercial Paper	FHA New Minus Aaa Utility	GNMA minus 10-yr Gov't	
	FHA New	Conventional		New	Conventional									10-yr	26-wk				
		New	Existing		New	Existing													
1978																			
OCT	9.93	9.95	9.95	9.83	9.90	9.750-10.125			10.053	10.198	9.33	9.17	8.64	8.493	8.98	76	69		
NOV	9.99	10.10	10.15	9.86	9.97	9.750-10.125	11.55		10.293	10.560	9.43	9.27	8.81	9.204	10.14	72	62		
DEC	10.16	10.30	10.30	10.02	10.08	9.875-10.125			10.508	10.825	9.61	9.28	9.01	9.397	10.37	88	60		
1979																			
JAN	10.17	10.30	10.30	10.18	10.33	10.125-10.250			10.693	11.060	9.70	9.54	9.10	9.501	10.25	63	60		
FEB	10.17	10.35	10.35	10.18	10.36	10.125-10.250	11.79		10.506	11.040	9.68	9.53	9.10	9.349	9.95	64	60		
MAR	10.19	10.35	10.40	10.32	10.47	10.125-10.375			10.423	10.932	9.73	9.62	9.12	9.458	9.90	57	61		
APR	n.a.	10.55	10.55	10.34	10.54	10.125-10.375			10.645	11.035	9.86	9.70	9.18	9.490	9.85	n.a.	68		
MAY	10.61	10.80	10.80	10.47	10.60	10.250-10.500	12.23		10.847	11.357	10.02	9.83	9.23	9.531	9.94	78	79		
JUN	10.49	10.90	10.90	10.66	10.71	10.250-10.625			10.773	11.560	9.81	9.50	9.87	9.062	9.76	99	90		
JUL	10.46	10.95	11.00	10.78	10.93	10.250-10.625			10.652	11.521	9.81	9.59	8.95	9.236	9.87	87	86		
AUG	10.58	11.10	11.15	11.01	11.14	10.375-10.625	12.52		10.671	11.517	9.97	9.48	8.99	9.425	10.27	110	98		
SEP	11.37	11.35	11.35	11.02	11.20	10.625-10.875			11.091	11.741	10.40	9.83	9.33	10.203	11.63	154	107		
OCT	n.a.	12.15	12.20	11.18	11.30	11.250-11.500			12.497	12.865	11.30	10.97	10.30	11.660	13.23	n.a.	100		
NOV	12.41	12.50	12.50	11.37	11.52	11.500-12.000	13.36		12.797	13.794	11.58	11.42	10.65	11.856	13.57	99	93		
DEC	12.24	12.50	12.50	11.64	11.89	11.875-12.000			12.485	12.981	11.56	11.25	10.39	11.847	13.24	99	117		
1980																			
JAN	12.60	12.80	12.80	11.89	12.11	11.875-12.250			12.930	13.188	11.96	11.73	10.80	11.851	13.04	87	116		

LONG-TERM MORTGAGE LOANS CLOSED

(Dollars in Millions)

Year and Month	BY TYPE OF INSTITUTION					BY TYPE OF UNIT, AND INSTITUTION														
						1-4 Units					5+ Units					Nonresidential				
	Total	Mtg. Bankers	S&Ls	Banks ^a	Life Cos.	Total	Mtg. Bankers	S&Ls	Banks ^a	Life Cos.	Total	Mtg. Bankers	S&Ls	Banks ^a	Life Cos.	Total	Mtg. Bankers	S&Ls	Banks ^a	Life Cos.
1978																				
SEP	17,586	4,080	6,165	6,385	956	13,778	3,510	5,867	4,352	49	662	100	182	278	102	3,146	470	116	1,755	805
OCT	18,238	4,670	6,205	6,273	1,090	13,902	3,850	5,860	4,129	63	694	70	217	223	184	3,642	750	128	1,921	843
NOV	18,204	4,280	5,895	6,837	1,192	13,844	3,720	5,582	4,442	100	769	170	193	266	140	3,591	390	120	2,129	952
DEC	19,905	5,670	5,269	6,567	2,399	13,371	3,790	4,913	4,440	228	1,104	200	204	365	335	5,430	1,680	152	1,762	1,836
1979																				
JAN	14,599	4,080	4,080	5,740	699	11,016	3,640	3,779	3,530	67	677	120	182	278	97	2,906	320	119	1,932	535
FEB	12,072	3,560	3,419	4,245	848	8,901	2,840	3,181	2,797	83	522	50	141	184	147	2,649	670	97	1,264	618
MAR	14,051	3,340	4,716	4,818	1,157	10,729	2,890	4,433	3,322	84	709	150	167	286	106	2,593	300	116	1,210	967
APR	15,061	3,810	5,386	4,892	973	11,699	3,040	5,115	3,400	144	873	150	165	238	120	2,489	420	106	1,254	709
MAY	17,183	3,910	6,671	5,616	966	13,819	3,396	6,316	4,000	57	567	65	231	213	58	2,797	449	124	1,353	871
JUN	19,899	4,263	7,209	7,120	1,307	16,005	3,754	6,848	5,246	107	879	199	208	225	247	3,065	310	153	1,649	953
JUL	19,368	4,852	6,111	7,169	1,236	15,412	4,238	5,811	5,237	126	771	232	177	269	93	3,185	362	123	1,663	1,017
AUG	20,200	5,735	6,587	6,661	1,237	16,625	5,066	6,304	5,041	214	787	144	156	338	149	2,808	525	127	1,282	874
SEP	18,188	5,532	5,507	5,706	1,443	14,088	4,681	5,191	3,978	238	847	331	180	265	171	3,153	520	136	1,463	1,034
OCT	20,011	5,554	6,223	6,729	1,505	16,009	5,026	5,916	4,847	220	583	56	184	192	151	3,419	472	123	1,690	1,134
NOV	17,252	4,678	4,968	6,175	1,431	13,107	3,873	4,724	4,260	250	613	138	130	223	122	3,532	667	114	1,692	1,059
DEC	14,318p	4,535p	3,304p	5,018p	1,461p	10,417p	3,540p	3,112p	3,338p	427p	593p	129p	75p	251p	141p	3,308p	869p	117p	1,429p	891p

LONG-TERM COMMITMENT ACTIVITY

(Dollars in Millions)

MORTGAGE INSURANCE

(Units in thousands; dollars in millions)

Year and Month	OUTSTANDING										ISSUED DURING MONTH					APPLICATIONS RECEIVED UNITS			INSURED.							
					Life Cos.					Life Cos.				Total		FHA (203)		VA		Private						
	Total	Mtg Bankers	S&Ls	Banks ^a		Total	Mtg Bankers	S&Ls	Banks ^a		Total	FHA VA	Private	Units	Amt	Units	Amt	Units	Amt	Units	Amt					
1978																										
AUG	74,650	17,060	22,047	12,432	23,111	17,618	3,610	8,924	3,251	1,633	169	96	73	129	4,935	23	761	33	1,319	73	2,855					
SEP	74,316	16,170	21,648	13,293	23,205	17,568	4,280	8,163	3,415	1,710	138	73	65	102	3,949	18	584	22	801	62	2,484					
OCT	75,247	16,570	21,503	13,545	23,629	19,065	5,450	8,594	3,081	1,940	188	122	66	131	4,921	40	1,279	28	1,179	63	2,473					
NOV	74,594	17,270	20,738	12,393	24,193	17,272	4,300	7,813	3,009	2,150	152	94	58	121	4,002	17	574	27	1,116	77	2,312					
DEC	72,426	17,300	18,911	12,029	24,186	16,155	4,830	6,167	2,475	2,683	121	72	49	93	3,805	11	388	28	1,177	54	2,240					
1979																										
JAN	71,434	17,320	18,053	11,271	24,790	13,865	4,050	5,478	2,362	1,975	118	79	39	109	4,393	29	963	33	1,419	47	2,011					
FEB	72,130	16,490	19,038	11,637	24,965	13,580	3,630	6,076	2,234	1,640	114	74	40	93	3,861	27	936	31	1,367	35	1,558					
MAR	75,593	17,430	21,085	11,549	25,529	17,520	3,900	8,713	2,525	2,382	157	102	55	98	4,027	25	855	32	1,415	41	1,753					
APR	76,264	14,860	22,923	12,169	26,312	19,030	4,020	9,493	3,257	2,260	169	106	63	90	3,741	19	665	24	1,075	47	2,001					
MAY	80,544	15,855	23,569	13,127	27,993	21,926	4,630	10,387	3,745	3,164	185	116	69	102	4,246	23	806	24	1,082	55	2,358					
JUN	79,826	14,831	22,777	13,139	29,079	19,527	3,823	9,003	3,795	2,906	166	103	63	103	4,338	24	846	24	1,096	55	2,396					
JUL	81,240	16,291	22,366	12,899	29,684	18,343	4,464	8,167	3,215	2,497	170	112	58	117	4,996	29	1,058	31	1,423	57	2,515					
AUG	85,197	19,317	22,282	13,329	30,269	21,140	6,608	8,852	3,305	2,375	177	118	59	116	5,042	25	912	35	1,695	56	2,453					
SEP	87,063	21,553	22,397	12,027	31,086	18,098	5,203	7,730	2,489	2,676	150	100	50	104	4,646	20	744	39	1,910	45	1,992					
OCT	80,082	16,335	20,930	11,575	31,242	18,010	4,858	7,992	2,889	2,271	155	98	57	104	4,580	29	1,092	22	1,100	53	2,388					
NOV	75,796	15,875	19,029	11,346	30,546	12,819	3,967	4,741	2,416	1,695	116	76	40	102	4,493	27	1,004	29	1,391	46	2,098					
DEC	69,706p	14,217p	16,007p	10,556p	28,926p	9,209p	3,154p	3,248p	1,912p	895p	79	50	29	91	4,117	20	769	31	1,531	40	1,817					

SECONDARY MARKET ACTIVITY

(Dollars in Millions)

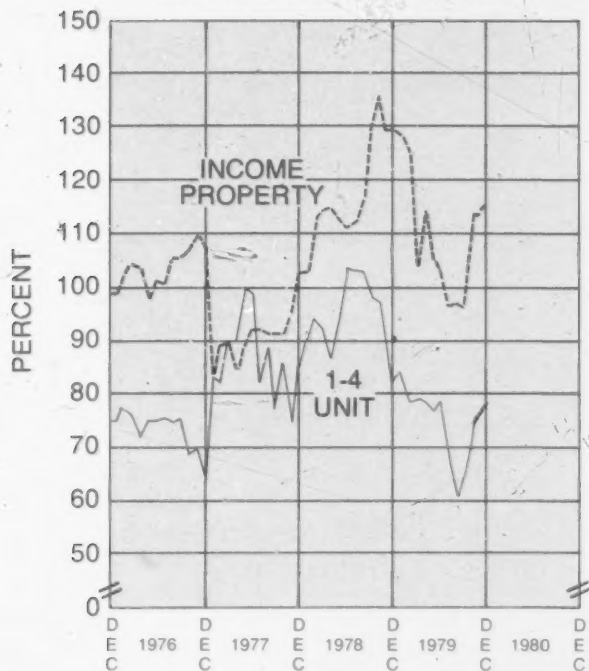
MORTGAGE BANKERS CONSTRUCTION AND LAND LOAN ACTIVITY

(Dollars in Millions)

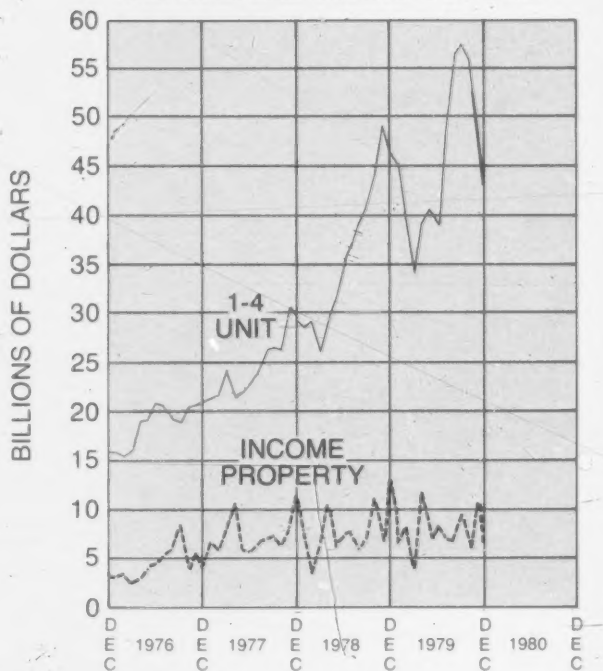
Year and Month	(Dollars in Millions)										(Dollars in Millions)									
	FNMA					FHLMC			GNMA		DISBURSEMENTS DURING MONTH					OUTSTANDING COMMITMENTS TO BORROWERS				
	4-Month Commitments				12 Month Convert Standby	Comm.	Purc.	Sold	Pass-Through Securities		Construction				Land Loans	Total	1-4 Units	5+ Units	Non-res.	
	FHA VA Bid	Accept	Conventional Bid	Accept					Applications	Issued	Total	1-4 Units	5+ Units	Non-res.						
1978																				
OCT	1,965	832	1,157	496	502	514	791	370	3,580	1,762	600	260	160	180	60	4,320	1,530	1,180	1,610	
NOV	788	322	861	387	507	582	765	581	2,869	1,721	570	260	120	190	40	4,150	1,520	1,110	1,520	
DEC	627	320	417	221	319	290	598	340	3,295	1,381	620	270	180	170	40	4,190	1,550	1,130	1,510	
1979																				
JAN	305	155	114	58	132	327	498	321	2,925	1,426	550	250	100	200	50	4,400	1,700	1,140	1,560	
FEB	211	161	63	45	89	295	401	291	2,892	1,304	420	230	80	110	30	4,130	1,640	960	1,530	
MAR	508	284	145	114	71	427	350	116	2,680	1,453	470	280	80	110	40	4,620	1,700	1,150	1,770	
APR	1,323	638	662	364	517	492	358	363	5,907	1,408	570	300	120	150	50	4,250	1,610	1,230	1,410	
MAY	426	185	459	214	503	601	560	572	3,009	1,673	560	330	100	130	60	3,910	1,820	740	1,350	
JUN	220	100	358	195	277	462	447	182	3,621	1,860	700	450	110	140	50	4,460	2,060	1,120	1,280	
JUL	133	70	94	70	160	517	518	320	6,211	2,032	594	312	121	161	59	4,010	1,870	1,070	1,270	
AUG	162	83	246	184	184	581	636	354	5,105	2,933	734	339	151	244	81	4,553	2,072	1,069	1,412	
SEP	1,421	600	527	326	343	437	537	347	4,012	2,640	723	312	86	325	152	4,897	2,101	679	2,117	
OCT	943	1,130	1,050	431	828	504	552	531	6,509	2,639	784	307	106	371	45	4,487	1,636	1,224	1,627	
NOV	558	265	366	190	0	221	458	186	7,410	3,250	640	248	144	248	44	4,632	1,608	1,344	1,680	
DEC	649	249	413	152	0	199	403	211	3,539	1,894	668p	256p	115p	297p	39p	4,343p	1,739p	923p	1,681p	
1980																				
JAN	516	232	443	247	26	296	279	180	4,265	2,611	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	

n.a.-Not available; p-Preliminary.

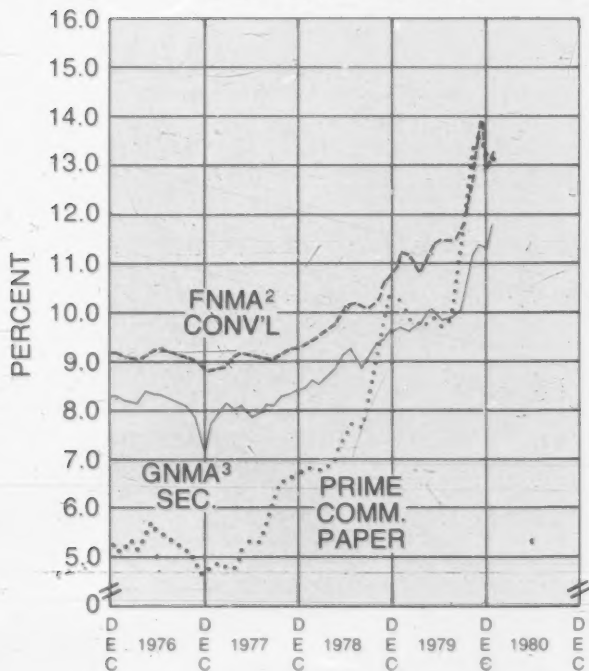
MORTGAGE BANKERS' LONG-TERM MORTGAGE COVERAGE¹



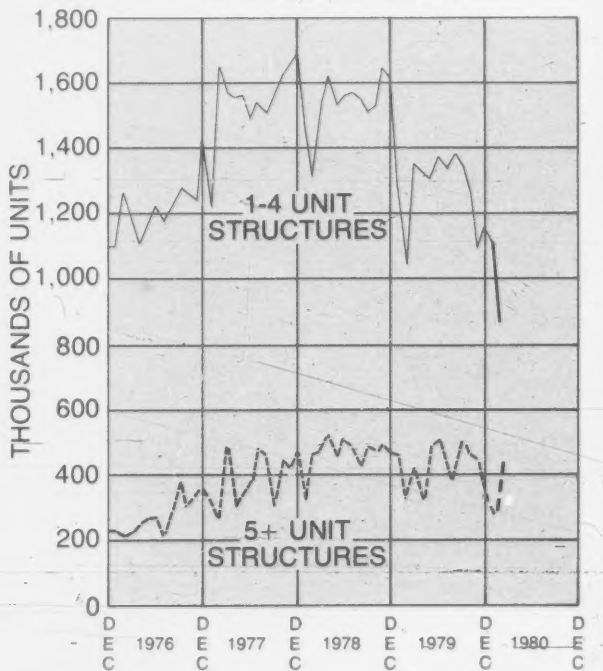
MORTGAGE BANKERS' LONG-TERM MORTGAGE LOANS CLOSED⁴



SELECTED YIELDS



HOUSING STARTS⁴



FOOTNOTES

1. OUTSTANDING LONG-TERM COMMITMENTS RECEIVED FROM INVESTORS DIVIDED BY THE SUM OF OUTSTANDING END OF MONTH INVENTORY AND OUTSTANDING LONG-TERM COMMITMENTS ISSUED TO BORROWERS, MULTIPLIED BY 100.
2. WEIGHTED AVERAGE GROSS YIELDS FOR ACCEPTED BIDS OF ALL FNMA FREE MARKET AUCTIONS DURING THAT MONTH.
3. SURVEY OF THREE NEW YORK SECURITY DEALERS. SECURITIES FOR IMMEDIATE DELIVERY.
4. SEASONALLY ADJUSTED ANNUAL RATES.

SOURCES: BUREAU OF THE CENSUS, FEDERAL NATIONAL MORTGAGE ASSOCIATION, FEDERAL RESERVE BOARD, MORTGAGE BANKERS ASSOCIATION

MBA—ECONOMICS DEPARTMENT